Pinnacle™ LL Underwater Light



PROJECT NAME

TYPE

CATALOG #

QUANTITY

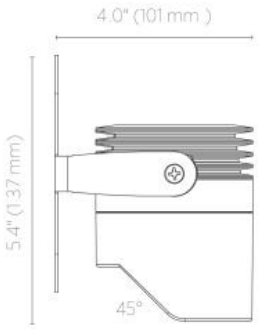
NOTES

For highly versatile underwater lighting, the LL combines the efficiency of LED Technology with the zoning, dimming, and color-changing capabilities of ZD and ZDC Technology®.

Quick Facts

- Premium, corrosion-resistant brass construction protects internal and external elements of the fixture
- Offers 220° of vertical alignment.
- Serviceable with an IP68 rating
- Driver on Board Technology layout for compact design and fewer components
- Built-in Luxor® Technology enables powerline zoning, smooth dimming, and RGBW color-changing with the Luxor Controller
- Available in static color temperature, wildlife-friendly, and dynamic RGBW color-changing options

LL Dimensions





LL Photometrics

LL 3LED Illuminance at a Distance

Feet (Meters)	Center Beam	Beam Width	
	Foot-Candle (Lux)	Vertical 17.3°	Horizontal 17°
4' (1.2 m)	52 fc (560 lx)	1' (0.4 m)	1' (0.4 m)
8' (2.4 m)	13 fc (140 lx)	2' (0.7 m)	2' (0.7 m)
12' (3.7 m)	6 fc (62 lx)	4' (1.1 m)	4' (1.1 m)
16' (4.9 m)	3 fc (36 lx)	5' (1.5 m)	5' (1.5 m)
20' (6.1 m)	2 fc (23 lx)	6' (1.9 m)	6' (1.8 m)
24' (7.3 m)	1.2 fc (13 lx)	8' (2.4 m)	8' (2.4 m)

LL 3LEDT Illuminance at a Distance

Feet (Meters)	Center Beam	Beam Width	
	Foot-Candle (Lux)	Vertical 21.1°	Horizontal 20.6°
4' (1.2 m)	30 fc (325 lx)	2' (0.5 m)	2' (0.5 m)
8' (2.4 m)	8 fc (82 lx)	3' (0.9 m)	3' (0.9 m)
12' (3.7 m)	3 fc (37 lx)	5' (1.4 m)	4' (1.3 m)
16' (4.9 m)	1.9 fc (21 lx)	6' (1.8 m)	6' (1.8 m)
20' (6.1 m)	1.2 fc (13 lx)	8' (2.3 m)	7' (2.2 m)
24' (7.3 m)	0.8 fc (9 lx)	9' (2.7 m)	9' (2.7 m)

LL 6LED Illuminance at a Distance

Feet (Meters)	Center Beam	Beam Width	
	Foot-Candle (Lux)	Vertical 16°	Horizontal 17°
4' (1.2 m)	118 fc (1,265 lx)	1' (0.3 m)	1' (0.4 m)
8' (2.4 m)	29 fc (317 lx)	2' (0.7 m)	2' (0.7 m)
12' (3.7 m)	13 fc (141 lx)	3' (1.0 m)	4' (1.1 m)
16' (4.9 m)	7 fc (79 lx)	5' (1.4 m)	5' (1.4 m)
20' (6.1 m)	5 fc (51 lx)	6' (1.7 m)	6' (1.8 m)
24' (7.3 m)	3 fc (30 lx)	7' (2.2 m)	8' (2.3 m)

LL 9LED Illuminance at a Distance

Feet (Meters)	Center Beam	Beam Width	
	Foot-Candle (Lux)	Vertical 16.6°	Horizontal 17°
4' (1.2 m)	150 fc (1,615 lx)	1' (0.4 m)	1' (0.4 m)
8' (2.4 m)	38 fc (404 lx)	2' (0.7 m)	2' (0.7 m)
12' (3.7 m)	17 fc (180 lx)	4' (1.1 m)	4' (1.1 m)
16' (4.9 m)	9 fc (101 lx)	5' (1.4 m)	5' (1.4 m)
20' (6.1 m)	6 fc (65 lx)	6' (1.8 m)	6' (1.8 m)
24' (7.3 m)	4 fc (39 lx)	8' (2.3 m)	8' (2.3 m)

LL ZDC Illuminance at a Distance

Feet (Meters)	Center Beam	Beam Width	
	Foot-Candle (Lux)	Vertical 43°	Horizontal 43°
4' (1.2 m)	12 fc (129 lx)	3' (1.0 m)	3' (1.0 m)
8' (2.4 m)	3 fc (31 lx)	6' (1.9 m)	6' (1.9 m)
12' (3.7 m)	1.3 fc (14 lx)	9' (2.8 m)	9' (2.9 m)
16' (4.9 m)	0.7 fc (8 lx)	12' (3.8 m)	13' (3.8 m)
20' (6.1 m)	0.5 fc (5 lx)	16' (4.7 m)	16' (4.8 m)
24' (7.3 m)	0.3 fc (3 lx)	19' (5.7 m)	19' (5.8 m)

LL Spec Chart

Output	3LED	3LEDT	6LED	9LED	ZDC
Halogen Lumen Equivalent	20W	20W	35W	50W	20W

Output	3LED	3LEDT	6LED	9LED	ZDC
Total Lumens†	225	121	445	600	145-330
Input Voltage	10 to 15V	10 to 15V	10 to 15V	10 to 15V	11 to 15V
Input Power (W)	4.2	4.2	8.2	10	9.1
VA	4.5	4.5	9.3	12.2	11
Efficacy (Lumens/Watt)	54	34	54	46	26
Color Rendering Index (CRI)	84	--	84	84	81
Center Beam Candlepower*					
Spot (17-20)	1,100	492	2,700	3,500	170
Dimming	PWM, Phase**	PWM, Phase**	PWM, Phase**	PWM, Phase**	--
RGBW Available	No	No	No	No	Yes
Luxor Compatibility					
Default	Zoning	--	Zoning	Zoning	--
ZD Option	Zoning/Dimming	Zoning/Dimming	Zoning/Dimming	Zoning/Dimming	--
ZDC Option	--	--	--	--	Zoning/Dimming/Color
Minimum Rated Life (L70)	50,000 Hrs	50,000 Hrs	50,000 Hrs	50,000 Hrs	50,000 Hrs

* Information not available for Flood or Wide Flood.

** For optimal performance, use a trailing-edge, phase-cut dimmer.

† Measured using the 3,900K CCT lens. Multipliers for other CCTs include 0.80 (2,700K), 0.65 (4,500K), and 0.65 (5,200K).

ADDITIONAL CERTIFICATIONS

UL 676

Model Configurator

LL							
MODEL	LIGHTING ENGINE	LUXOR CONTROL	POWER	LED COLOR	COMPLIANCE	WIRE LEAD	FINISH

LIGHTING ENGINE

- ☐ **Powerboard Integrated LED**

LUXOR CONTROL

- ☐ **ZDC**
  Zone/Dim/Color with Luxor (Large Round 3LED)
- ☐ **ZD**
  Zone/Dim with Luxor

POWER

- ☐ **3LED**
  4.5 VA
- ☐ **6LED**
  9.3 VA
- ☐ **9LED**
  12.2 VA
- ☐ **[Default]**
  Default ZDC Option 6.0W/7.2VA

LED COLOR

- ☐ **[Default]**
  Warm (2700K)
- ☐ **T**
  Wildlife-Friendly (585 to 595 nm)

COMPLIANCE

- ☐ **[Default]**
  North America (UL Listed)
- ☐ **E**
  International (CE Certified)

WIRE LEAD

- ☐ **[Default]**
  30' (9 m)
- ☐ **100**
  100' (30 m)

FINISH

- [ ] **BS**
  Natural Brass

Accessories

POWER

- [ ] 
  MT-6W
  Plug-In Transformer, 6 W

- [ ] 
  ST-UV
  Step-Down Transformer, UV (120/277 V to 12 V)

- [ ] 
  SURGE-MOD
  Surge Protection Module